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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,349	12/02/2003	Teresa Mujica-Fernaud	MERCK-2805	1371
23599	7590	10/27/2005	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			OWENS, AMELIA A	
			ART UNIT	PAPER NUMBER
			1625	

DATE MAILED: 10/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,349	Applicant(s) MUJICA-FERNAUD ET AL.	
	Examiner Amelia A. Owens	Art Unit 1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 and 28-32 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 14-16 and 34 is/are allowed.
- 6) ☒ Claim(s) 8-13, 17-21, 26, 27 is/are rejected.
- 7) ☒ Claim(s) 11, 18 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-32,34 are pending.

Election/Restrictions

2. Applicants' remarks regarding the restriction have been considered and are not found persuasive for the reasons of record. Claims 22-25,28-32 remain withdrawn. Claim 25 is included as it depends from nonelected claim 24.

Claim Rejections - 35 USC § 112

Claim 8-13,17-20,26-27 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for treating psoriasis, rheumatoid arthritis, for example, does not reasonably provide enablement for generally treating bone pathology, solid tumors, inflammatory diseases, inhibiting angiogenesis, inhibiting tyrosine kinase. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Applicants' comments have been considered but are not found persuasive. Compounds according to the invention were tested for their tyrosine kinase activity. See Table 1 @ page 49. However, Tyrosine kinase inhibition per se is not a utility. It is clear from the specification that applicants are inhibiting tyrosine kinase for a specific purpose -- to inhibit proliferative processes. It is known that protein tyrosine kinases (PTKs) are associated with proliferative processes (angiogenesis) in specific disease states. See Levitzki, Tyrophostins: tyrosine kinase blockers as novel antiproliferative agents and dissectors of signal transduction, PMID: 1426765.

Angiogenesis is associated with diabetic retinopathy, age related macular degeneration, rheumatoid arthritis, psoriasis for example. See abstract, Cherrington et al , New paradigms for the treatment of cancer: the role of antiangiogenesis agents. PMID: 10818676. Thus, the skilled artisan recognizes that tyrosine kinase inhibition is related to a specific/limited set of diseases/conditions.

3. Claims 9,12,13,17,19,20, 26,27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled

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in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The methods of claims 17,20 encompass unidentified bone pathology, inflammatory disease, a description of which is not found in the specification.

Claims 9,10 encompasses as yet unidentified solid tumors associated with the cerebrum, genitor-urinary, lymphatic system, a description of which is not found in the specification.

Claim 12 encompasses as yet unidentified diseases associated with inhibiting angiogenesis, a description of which is not found in the specification.

Claim 13 encompasses as yet unidentified ocular diseases associated with inhibiting angiogenesis, a description of which is not found in the specification.

Claim 19 encompasses as yet unidentified diseases associated with tyrosine kinase a description of which is not found in the specification.

Claim 26,27 encompass unidentified disease related to oxidative stress, and neurodegenerative disorder, a description of which is not found in the specification.

Claim Objections

Claims 11,18,21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See paragraph 2 above.

Allowable Subject Matter

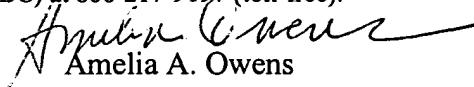
The state of the art is that angiogenesis is known to play a role in diabetic retinopathy, age related macular degeneration, rheumatoid arthritis, psoriasis for example. See abstract, Cherrington et al. Claims 1-7,14-16, 34 are allowed. The prior art neither teaches nor suggests the claimed compounds. In the absence of any evidence or apparent reason why the claimed compounds do not possess the disclosed utility, the allegation of utility in the specification must be accepted as correct. In re Kamal et al, 158 USPQ 320; Ex parte Krenzer, 199 USPQ 227.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia A. Owens whose telephone number is 571-272-0690. The examiner can normally be reached on Monday - Friday from 8:30 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Amelia A. Owens
Primary Examiner
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